

REMARKS

Claims 1-6, 10-15, 45-48, 55, and 56 are currently pending in the present application. Claims 1 and 56 are the only independent claims.

Specifically referring to the Office Action, the presently pending claims have been rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent number 6,029,659 to O'Connor (hereinafter, "the '659 patent") in view of U.S. Patent Number 6,431,168 to Rand, et al. (hereinafter, "the '168 patent.") According to the Office Action, the '659 patent discloses and apparatus similar to the presently claimed invention but does not disclose "a ramp contacted by a ferrule portion of the canister in a direction substantially non-axial to the first direction and which acts upon the switch means when the canister is moved in the first direction." However, the Office Action states that the '168 patent "teaches a ramp (16) that comes in contact with a ferrule portion of the canister and acts upon a switch means (18). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have a ramp means disclosed by Rand in the device of O'Connor for the purpose of supporting the switch."

In response thereto, Applicants contend that the presently claimed invention is not obvious in view of the cited prior art references. Specifically, there is no clear and explicitly made analysis for the basis of the obvious rejection. A detailed review of the cited prior art references would produce a contrary position to that of the Office Action. In fact, the claimed limitations of the present invention are structurally and functionally distinct from any components disclosed in the cited prior art references individually or collectively.

With regard to the presently claimed invention, the apparatus claimed includes, *inter alia*, a ramp that is contacted by a ferrule portion of the canister in a direction substantially non-axial to the first direction and which acts upon the switch means when the canister is moved in the first direction. This ramp is a protrusion (as defined in paragraph 63 of the published application) of the elastomeric seal. The ramp moves in response to direct contact with the ferrule portion of the canister. So, as the canister is depressed and forced (in the first direction) through the canister holder, the ferrule forces

the ramp to move in an outwardly radial direction away from the center of the canister holder (i.e., a direction substantially non-axial to the direction of the canister's motion). This movement of the ramp results in closing the contacts on the switch to activate the counter module. Thus, due to the slope of the ramp, as the canister moves in an up and down motion (i.e., first direction) and the ferrule portion of the canister moves along the ramp, the ramp and ultimately the elastomeric seal moves and flexes towards the switch means. This results in closing the circuit and counting the doses administered.

In contrast, there is no ramp or ramp-like structure disclosed in the '168 patent. What the Office Action identifies as a "ramp" is structurally and functionally different from the ramp of the present invention. In the '168 patent, the structure that the Office Action defines as a "ramp" is defined and described in the patent as a "driver yoke," which is by definition a clamp or similar piece that embraces two parts to hold or unite them in position (Webster's Ninth New Collegiate Dictionary, Merriam-Webster, p. 1368 (1993)). The driver yoke tilts with rotation of a drive shaft switching latch that moves into engagement with a star wheel that causes an incremental anti-clockwise rotation of a half tooth pitch of the star wheel. (Column 6, lines 33-40). The driver yoke moves in response to a drive pinion's engagement with a post within the housing (Column 6, lines 31-33) as the canister is moved.

The driver yoke described in the '168 patent is structurally and functionally different from the ramp of the presently claimed invention. Compared to the yoke of the '168 patent, the ramp of the presently claimed invention does not "embrace two parts to hold or unite them in position." This is a clear structural difference between the two parts. Further, the driver yoke functions completely differently from the manner in which the ramp of the presently claimed invention operates. The driver yoke is a mechanical counter mechanism that does not at all close any type of circuit. In essence, "counting of doses" occurs through a complicated orchestration of numerous moving parts that include the driver yoke interacting with a star wheel. However, in order for the driver yoke to move, it needs to be moved through a drive shaft that rotates as a result of movement of a drive pinion, which is formed with a number of teeth or pegs that can engage with a number of recesses or grooves formed on a post in the form of a rack molded inside a housing and extending from the base of the housing (Column 5, lines 45-49). The driver

yoke does not directly contact the ferrule portion of the canister. Therefore, movement of the canister is measured through numerous moving parts that need to be coordinated with each individual part.

In contrast, the presently claimed invention simply moves in response to the movement of the canister through direct contact between the ferrule portion of the canister and the ramp of the elastomeric seal. This is direct translational movement between the ferrule and the ramp. There are no additional components or parts that are needed to achieve the dose counting. Therefore, the driver yoke is both structurally and functionally different from the ramp of the presently claimed invention.

In summary, the present response places the present application in condition for allowance, which allowance is respectfully requested. If any remaining issues exist, Applicants respectfully request to be contacted through the undersigned below.

The Commissioner is hereby authorized to charge any additional Filing Fees required under 37 CFR §1.16, as well as any patent application processing fees under 37 CFR §1.17 associated with this communication for which full payment had not been tendered, to Deposit Account No. 01-0025.

Respectfully submitted,
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